DC
a: Leonard
Kevin C
B. Carlson

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:
5WCC-IUB-8

MAR 21 1991

J Barb C.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Roger E. Rader
Director of Materials Management
Harcros Pigments Inc.
2001 Lynch Avenue
East St. Louis, Illinois 62205

Subject: Section 308 Information Request to
Harcros Pigments Inc.
(Docket No. V-W-90-308-65)

Dear Mr. Rader:

This letter is in response to your letter of January 25, 1991, on the subject Section 308 Information Request (308). Our January 16, 1991, letter extended to January 30, 1991, the date the information requested in the subject 308 was due. We are aware that you asked for relief from the requirements of the 308 or to meet with us to redefine our information needs in the Jeffrey G. Miller December 31, 1990, proposal to eliminate discharging ammonia from its magnetic oxide process production. Further, in the January 4, 1991, Lisa A. Cherup acceptance letter to your proposal, she indicated that she would discuss this matter with Region V technical staff.

We have reviewed your request for relief from the information needs in the subject 308. Given that you are eliminating ammonia and/or converting to the Goethite process, we still require answers to the six (6) questions regarding the pretreatment facility and to some of the process information questions in our December 10, 1990, letter so we can attain a better understanding of all remaining processes and production amounts at the Harcros Pigment plant in East St. Louis, Illinois. The revised list of questions is enclosed. Please provide your response by April 16, 1991. If you have already prepared any information, please submit a partial response to us as soon as possible.

Sincerely yours,

Michael J. Mikulka, Chief
Compliance Section

Enclosure

cc: Kenneth Rogers, Chief, Compliance Assurance Section, IEPA ✓
Jeffrey G. Miller, Perkin COIE
Lisa Cherup, DOJ
Edmund Struzeski, SAIC

Enclosure

The following information on the pretreatment facility at the Harcros Pigment plant in East St. Louis has not been provided and is still needed to evaluate the impact of the substitute process on the wastewater treatment facility.

(1) Describe the existing facility by process and capacity and identify on layout (i.e., drawing a mark-up of the layout in the Sverdrup Report or its equivalent).

(2) Identify what equipment and/or processes are dedicated to treatment.

(3) Identify the nature of the wastes and identify what additional treatment processes, capacities and associated capital and O & M costs will be added during the transition to the Goethite process for producing iron oxides. Characterize the pretreatment plant effluent.

(4) Describe and identify on a layout the final treatment configuration after complete conversion to the Goethite process. Include a description of the nature of the wastes and any additional capital and O & M cost and capacities for all new treatment processes. Characterize the effluent by listing the Concentration of all chemicals in the effluent and estimate the production of each chemical.

(5) Provide monthly average weights for the past five years and projected future sludge quantities generated over the next five years, and provide corresponding sludge disposal methods and their associated costs.

(6) Equate iron oxide production units with treatment capacity required and amounts of sludge generated. i.e.: ___lbs. of iron oxide produced generates ___lbs. of sludge. Includes assumptions and typical calculations.

The following information is still needed on the original list of questions.

EPA #1. Complete and Detailed Process/Waste Flow Diagrams for Eight Different Process Sectors.

Express ammonia inputs in consistent terms (NH_3-N, or other) and identify.

EPA in the 308 request indicated that process flow diagrams shall reflect or be provided for future manufacturing after implementation of Harcros' ammonia reduction programs. Supporting diagrams need to be provided for Yellow Iron Oxide and Sulfate Magnetics in the future, as also for other main production sectors impacted by the ammonia reduction program(s).

Diagram 5, Substitution of Sodium Carbonate For Ammonia In Diagram 3.

Please provide lb/year figures for all inputs and outputs where these presently are not shown; this data is important for the material balances.

EPA # 5. Yellow Iron Precursor Shipped To Easton, Pennsylvania Plant.

Please confirm that no other Harcros of Pfizer facility including the California plant ships material to the Easton plant.

EPA # 6. Projected Monthly Production, August 1990 to December 1993.

Harcros provided production information on September 28 and October 12.

Why does the October 12 response on 1990 production for total yellow pigment show 12.463 million lbs. vs. 17.79 million lbs in the September 28 response (i.e. 1.047 million lb + 1.780 million lb + 2.787 million lb + 12.194 million lb)? Please explain.

The 1990 production figures for Magnetics in the October 12 submittal shows 11.68 million lbs vs. 15.29 million lbs in the September 28 submittal. Please explain differences.

Future production figures are required for all process sectors rather than for selected sectors.

EPA # 8. Ammonia Usage For Each Major Process Sector, August 1990 to December 1993, And Amounts Recoverable By Planned Recycle Programs.

The table provided by Harcros on October 12 shows complete phase out of ammonia usage for Yellow Pigment sector starting in 1991; Is this true? Information in the various 308 responses is confusing because the September 28 submittal gives numerical data in one case for the "Total Yellow Oxide" sector vs. "Total Yellow Pigment" in another case, and the October 12 submittal emphasizes "Yellow Pigment" and Total Yellow Pigment. To eliminate confusion, consistency must be maintained. EPA suggests that the yellow oxide description be retained throughout, and the various subprocesses under total yellow oxide by fully defined and described in each table. What is the future picture for sulfate magnetics?

Why is 32,896 lb/year ammonia N usage projected for $FeSO_4$ liquor (preparation?) for 1991-1993 vs. much lower amounts in 1986-1988, and zero usage for 1989-1990?

What do the negative ammonia consumption figures in the table mean?

Please explain why the diagrams submitted on September 28 show much higher ammonia usage figures than the various information given in the October 12 submittal.

It is observed that Magnetic Inks will in the future represent a very large percent of remaining ammonia over and above Gamma and CIM Magnetics, i.e. 378,222 lb/year for magnetic inks. It is imperative that process information be provided and EPA understand where magnetic inks fit into the overall ESL processes.

Information has not been provided as requested by EPA # 8 on amounts of ammonia recoverable by planned recycle programs or any recycle programs.

EPA # 11. Detailed Sewer Maps, Building Connections, Monitoring Stations, et.al.

Harcros on September 11 apparently made a qualifying statement on information to be included in the sewer maps. The data originally requested by EPA under EPA # 11 is relevant in order to have accounting of all flows leaving each process, flows going to the pretreatment plant (or not going to the PT plant), and all contributing flows to each of the three main plant sewers. All processes and treatment methods whether referring to ammonia or not, are to be fully described in the sewer maps. A map was provided September 28, 1990, but it did not identify all processes and treatment methods.

EPA #12. Ammonia and Iron Sampling Data Developed By Harcros.

In response to Harcros' interpretation of September 11, EPA has an important need to receive all iron sampling data in Harcros' possession whether collected by Harcros, Pfizer, Sauget or anyone else. Please verify whether Harcros has any ammonia or other nitrogen sampling data whether developed by Harcros/Pfizer or anyone else excluding Sauget.

EPA #13. Waste Handling And Treatment Processes at Easton, Pennsylvania Plant Applicable To ESL.

Response was made by Harcros to EPA # 13 in their submittals of September 11 and October 26; this issue was further discussed between Ms. Cherup, Esq. of DOJ and Jeffrey Miller, Esq. representing Harcros in letters of October 30 and November 6.

EPA continues to request all information specified in the original 308 request. The submittal of October 26 only provided a partial response to EPA # 13. The EPA request includes information on all process or waste control, recovery, and treatment measures at Easton, Pennsylvania, that could in any way apply or impact the ESL plant.

Ms. Cherup's letter of October 30 to Mr. Miller stated that... "Further, during Mr. Wilkinson's deposition in the Easton case, the U.S. introduced as an exhibit a CWA Section 308 request from EPA, Region III dated March 11, 1988 (Exhibit 24, attached). Item 3 of that request asked for:

a) a description of the pretreatment technology (presumably at the Easton, Pennsylvania plant) required to achieve 90% removal of total iron and NH_3-N;

b) cost estimate for such equipment including capital cost and annual operation and maintenance cost in 1988 dollars; and

c) most expeditious schedule for installing such equipment."

Mr. Miller responded on November 6 that he had... "advised Mr. Rader to determine whether Harcros is in possession of any other consultant reports developed for Pfizer Pigment to respond to the earlier Section 308 request to Pfizer and to seek from Pfizer copies of any such reports not in Harcros' possession and to supplement this submission with any other such documents which are relevant to EPA's current Section 308 request for Harcros."

Although the above statements mainly refer to EPA # 15 and # 23, they also refer to EPA # 13. If Harcros has not already provided the above information relative to EPA #13, such information reports are requested again.

EPA #14. Relation of Capacity Production to Average And Normal Production.

It is agreed that capacity production has been defined by Harcros. However, capacity production must be intrinsically related (and appropriately defined) to past actual production figures given by Harcros in their 308 response and to the various production numbers in the diagrams presented by Harcros in the September 28 submittal.

EPA # 24. Location of Other Harcros/Pfizer Plants Prodcuing Magnetic Iron Oxide.

Please clarify if there is a Califorinia facility producing magnetics.